UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,521	01/18/2001	Raja Daoud	10002667-1	6409

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EXAMINER
BASOM, BLAINE T

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

<table>
<tr><td rowspan="2">Office Action Summary</td><td colspan="2">Application No.</td><td>Applicant(s)</td></tr>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 July 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,4-14 and 16-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,4-14 and 16-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 January 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 1, 8, and 16, the

Applicants' cancellation of claims 3 and 15, and the Applicants' addition of new claim 21.

Regarding the pending claims, the Applicants argue that Adar (U.S. Patent No. 6,470,269 to

Adar et al.) and Killian (U.S. Patent No. 6,438,592), presented in the previous Office Action, fail

to teach the limitations of monitoring user interaction, including abort times and abort

frequencies of Internet queries, generating an interaction profile "based" on the user interaction,

and optimizing the computing session "based at least in part" on the generated interaction

profile, as expressed in each of the independent claims. The Examiner respectfully disagrees.

The Examiner respectfully notes that there is no direct recitation as to how the interaction profile

is generated according to monitored abort times and frequencies. In fact, given the broadest

most reasonable interpretation of the claim language, it is entirely possible that the monitored

user interaction could, in addition to abort frequencies and abort times, involve monitor other

user interaction. It is further within the scope of the claims that, based on this other user

interaction, a user patience level may be generated. Accordingly, and for the reasons further

provided below, Adar and Killian are understood to teach the features of at least the independent

claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-2, 4-14, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Patent No. 6,438,592, which is attributed to Killian, and also over U.S. Patent No.

6,470,269, which is attributed to Adar et al. (hereafter referred to as "Adar"). In general, Killian

describes a system for dynamically improving the delivery time of web content from a server to a

client computer located over a network. The client computer specifically monitors the time

required to receive web pages from the server, and based on this monitored time, future web

pages received from the server may be formatted in order to decrease the delivery time of the

content (see the abstract). Therefore, for a user of a particular client computer, delivery time of

content is optimized, and consequently, Killian is considered to teach a method for optimizing a

computing session for a particular user.

Regarding claim 1, Killian discloses that, in response to an initial URL request from a

client, the server transmits "performance monitoring" instructions to the client computer (see

column 3, lines 23-46). These performance monitoring instructions are executed by the client

computer when retrieving subsequent content from the server, and are responsible for sending to

the server "performance messages" indicating the time required to receive and display such

subsequent content (see column 3, lines 23-46). Depending on the content delivered, a

performance message comprises either: the amount of time taken to download a web page from

the server; the amount of time taken to download an individual web page component, such as a

picture, from the server; the amount of time taken to execute a segment of code associated with a

web page received from the server; the amount of time taken to submit an HTML form; or, the

amount of time taken before the user aborts downloading a web page from the server (see

column 8, line 57 – column 9, line 60). Killian discloses that the monitored amount of time

taken before the user aborts downloading a web page is incorporated within an

"unloadTimeDistribution" parameter, which provides an indication of how patient users are in

waiting for a particular page to be downloaded (see column 23, lines 44-48). It is understood

that for this unloadTimeDistribution to be valid, a set number of abort times over a "recent" time

duration must be monitored (for example, see column 36, lines 8-27). Generating the

unloadTimeDistribution therefore involves monitoring user abort time and user abort frequency.

The server receives such performance messages from the multitude of clients computers with

which it is associated, and uses the performance data comprised within such messages to

generate three data structures: a "clientSpaceTree," a "serverSpaceTree," and a "msgHistory"

(see column 9, line 61 – column 10, line 11). These three data structures are considered an

"interaction profile" like that recited in the claimed invention, as they collectively describe the

interaction between the server and each user, specifically by providing information regarding the

delivery times of particular web page components, which are sent to users of the client

computers in response to the user's requests. Killian particularly discloses that for each client

computer, a "browserID node" exists in the clientSpaceTree, and represents that client computer

(see column 19, lines 32-55). More specifically, Killian discloses that each such browserID node

comprises performance data relating to the client associated with the node (see column 21, lines

27-45). If this performance data indicates a problem for a particular client, such as an

unacceptable length of time required to receive and download content from the server to the

client, the browserID node associated with the client is designated as a "problemNode" (see

column 26, lines 25-38). In response to subsequent requests by a client represented by such a

problemNode, the server generates a "light version" of the requested web page and delivers it to

the client (see column 25, line 46 – column 26, line 11). The light version of the requested web

page comprises fewer or smaller images in order to improve delivery time of the web page to the

client (see column 4, lines 20-34). Accordingly, Killian describes a method for optimizing a

computing session with a server for a particular user, the method comprising: monitoring the

user's interaction with a computer during the computing session, or more specifically,

monitoring the user's access of web pages displayed by the computer during the computer

session, the monitored user interaction including abort times and abort frequencies of Internet

queries; generating an interaction profile, which is maintained by a clientSpaceTree, a

serverSpaceTree, and a msgHistory data structure, and which is based on the monitored user

interaction; and lastly, optimizing the computing session with the server based at least in part on

the generated interaction profile and a response policy, wherein particular, this response policy

involves delivering lighter versions of web pages to the client if the interaction profile of the

client shows an unacceptably high delivery time for content to the client. Killian, however, does

not explicitly disclose assigning a user patience level for the particular user, as is described in

claim 1.

In general, Adar presents a method for instituting "time discrimination" in world wide

web pages, which is meant to maximize the amount of advertisements presented to users (see

column 2, line 34 – column 3, line 46). Adar, like the teachings of Killian, discloses that such a

method entails monitoring user interaction with a computer during a computer session,

specifically, while the user browses the Internet (for example, see column 7, lines 12-48). Adar

discloses that this monitored user interaction is used to generate or update a profile for the

particular user; the user profile comprises information used to provide "confidence levels,"

which indicate how many links the user is willing to go through until he or she arrives at desired

information (for example, see column 7, lines 12-48). Accordingly, such confidence levels are

each considered indicative of a user patience level, like that recited in the claimed invention.

These confidence levels are used to optimize the user's browsing experience, so that for

example, a user more willing to traverse a larger amount of web pages is presented with a larger

sequence of web pages than a user that is less willing to traverse a lot of web pages to arrive at

desired information (see, for example, column 7, line 12 – column 8, line 13). Adar thus teaches

monitoring user interaction with a computer during a computer session, and generating an

interaction profile based on the monitored user interaction, the generating including assigning a

user patience level for the particular user.

It would have been obvious to one of ordinary skill in the art, having the teachings of

Killian and Adar before him at the time the invention was made, to modify the method taught by

Killian to additionally assign a confidence level, i.e. a patience level, to each particular user

based on monitored interaction, as done by Adar. It would have been advantageous to one of

ordinary skill to utilize such a combination because such a confidence level may be used to

generate additional advertising revenue, as is taught by Adar.

In reference to claims 8, 14, and 16, Killian discloses that the above-described method may be implemented using an applet delivered to the client computer, whereby this applet monitors user interaction through an Internet browser (see column 3, lines 34-63). For the reasons described above, it is understood that this data resulting from this monitored user interaction is used for generating an interaction profile and a response policy, and for updating this interaction profile, and wherein this interaction profile is used for optimizing the computing session with the server. A computer executing such an applet is therefore considered an apparatus, like that of claims 8 and 16, which is for optimizing a computing session for a particular user.

Regarding claims 2 and 4, Killian discloses that, in response to an initial URL request from a client, the server transmits "performance monitoring" instructions to the client computer (see column 3, lines 23-46). These performance monitoring instructions are executed by the client computer when retrieving subsequent content from the server, and are responsible for sending to the server "performance messages" indicating the time required to receive and display such subsequent content (see column 3, lines 23-46). Depending on the content delivered, a performance message comprises either: the amount of time taken to download a web page from the server; the amount of time taken to download an individual web page component, such as a picture, from the server; the amount of time taken to execute a segment of code associated with a web page received from the server; the amount of time taken to submit an HTML form; or, the amount of time taken before the user aborts downloading a web page from the server (see column 8, line 57 – column 9, line 60). These times occur between Internet queries, that is, between requests for data from the server. Accordingly, Killian teaches measuring times

between Internet queries. This is considered functionally equivalent to identifying a user

purpose.

In reference to claim 5, Killian discloses that the clientSpaceTree, which as described

above is part of an interaction profile, comprises a "browserID" for each client associated with

the server, whereby this browserID uniquely identifies the client (see column 21, lines 27-46).

More particularly, this browserID uniquely identifies the browser application used by the client

(see column 8, line 64 – column 9, line 6). Thus generating the interaction profile described by

Killian necessitates gathering system data including this browserID, which is considered to

uniquely identify the user platform, and more specifically, the browser application in use on this

user platform. In addition, Killian discloses the serverSpaceTree, which as described above is

part of an interaction profile, comprises a node for each file stored on the server (see column 22,

lines 10-32). It is understood that such files comprise the web pages and web page components

which are sent to the client computers (for example, see column 23, lines 31-53). As such web

page components are logically deployed within the web pages, these web page components are

considered "resources" like those recited in the present application. Thus generating the

interaction profile described by Killian necessitates gathering system data including available

resources.

In reference to claims 6-7, 9-10, and 17-19, Killian discloses the clientSpaceTree, which

as described above is part of an interaction profile, maintains a "browserID node" for each client

computer receiving web pages from the server (see column 19, lines 32-55). More specifically,

Killian discloses that each such a browserID node comprises performance data relating to the

client associated with the node (see column 21, lines 27-45). If this performance data indicates a

problem for a particular client, such as an unacceptable length of time required to receive and

download content from the server to the client, the browserID node associated with the client is

designated as a "problemNode" (see column 26, lines 25-38). In response to subsequent requests

by a client represented by such a problemNode, the server generates a "light version" of the

requested web page and delivers it to the client (see column 25, line 46 – column 26, line 11).

The light version of the requested web page comprises fewer or small images in order to improve

delivery time of the web page to the client (see column 4, lines 20-34). Such images are web

page components, and thus as expressed in the paragraph regarding claim 5, are considered

resources. Consequently, Killian teaches optimizing the computing session by allocating a

number of these resources based on the above-described interaction profile and response policy,

the response policy involving the delivery of lighter versions of web pages to the client if the

interaction profile of the client shows an unacceptably high delivery time for content to the

client. Thus the number of resources is allocated to optimize delivery time of the web for a

particular client. By the same reasoning, Killian teaches optimizing the computing session by

formatting output for the browser application by dictating a level of display detail based on the

above-described interaction profile and response policy.

As per claims 11-13, and 20, Killian teaches generating an interaction profile, which is

maintained by a clientSpaceTree, a serverSpaceTree, and a msgHistory data structure, and which

is based on the monitored user interaction, as is described above in the rejection for claim 1. As

shown above in the rejection of claims 2 and 5, this interaction profile maintains system data and

user data, wherein the user data includes user purpose and user patience level, and wherein the

system data includes at least a platform type, an application ID, and resource availability. Thus

in regard to claim 20, Killian is understood to present a means for assigning a user patience level;

a means for identifying a user purpose; and a means for creating a session ID, i.e. application ID,

which is based on the assigned user patience level and identified user purpose.

Regarding claim 21, Killian teaches: monitoring user interaction with a computer during

a computing session, the monitored user interaction including times between Internet queries;

generating an interaction profile based on the monitored user Interaction including identifying a

user purpose based on the times between the monitored Internet queries; and optimizing the

computing session based at least in part on the interaction profile and on a response policy, as is

described above in the rejection for claims 1, 2, and 4. As further described above in the

rejection for claim 1, Adar teaches assigning a user patience level for the particular user.

Accordingly, the above-described combination of Killian and Adar is considered to teach a

method like that of claim 21.

Conclusion

Applicant's amendment necessitated any new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
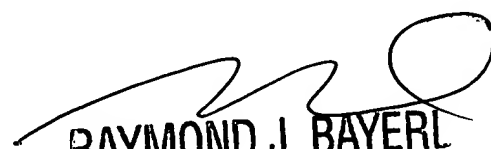
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The

examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb

RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173